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REMARKS

Claims 4-7 are currently pending in the patent application. The Examiner has objected to Claim 7 as containing an informality. Applicants have submitted an amendment to Claim 7 to address the informality. The Examiner has additionally rejected Claims 4-6 under 35 USC 103 as unpatentable over the teachings of Muramatsu in view of Glaser; and, Claim 7 under 35 USC 103 as being unpatentable over the teachings of Muramatsu and Glaser in view of Yamagishi. For the reasons set forth below, Applicants respectfully assert that all of the pending claims, as amended, are definite and patentable over the cited prior art.

The presently claimed invention comprises a liquid crystal display device comprising: a pair of glass substrates facing each other, each having electrodes for applying voltage to a liquid crystal material on a facing surface; a circuit board for supplying voltage; and a liquid crystal driver tape carrier package for connecting the electrodes of the glass substrates to the circuit board and mounting a liquid crystal driver chip, wherein the liquid

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crystal driver tape carrier package and the circuit board have anchor holes that are located in a path region of substantial propagation of stress resulting from a difference in coefficients of linear expansion between the glass substrates, with anchor pins inserted into the anchor holes, whereby the liquid crystal driver tape carrier package is soldered to the circuit board via the anchor pins (Claim 4, and Claims 5-7 which depend directly or indirectly therefrom).

The Muramatsu patent is directed to a circuit board structure wherein press fittings are used to join the structure (see: Col. 11, line 63-Col. 12, line 2). Muramatsu has pin shaped protuberances which are part of the frame section (also referred to as the "structural member") that holds the light guide. The pin shaped protuberances are press-fitted into holes in the spacing member 60, flexible wiring board 20, and circuit board 10 and are held in place by pressure. Muramatsu describes the structural member having the pin shaped protuberances as disposed on an opposite side from the side where the second circuit board is disposed. Accordingly, the pin shaped protuberances are provided at opposite sides of the structure (see:

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protuberances 48 disposed on along the width of the rectangular structure of Fig. 11).

Applicants respectfully assert that the Muramatsu structure does not obviate the invention as claimed; and, in fact, would be unworkable as described. Since Muramatsu provides the pin shaped protuberances on opposite sides of the structure, it cannot restrain movement relative to the frame in the plane direction resulting from any difference in coefficients of linear expansion which may be experienced between the flexible wiring board and the circuit board. The present invention, in contrast, does provide proper restraint since the anchor holes are provided in a path region of substantial propagation of stress resulting from a difference in coefficients of linear expansion between the glass substrates. Applicants respectfully assert that the Muramatsu patent does not obviate the invention as claimed since Muramatsu neither teaches nor suggests the claimed structure.

Applicants further aver that the addition of the Glaser patent teachings to the Muramatsu patent teachings would not result in the invention as claimed. Glaser teaches connector pins but does not disclose anchor pins. Moreover,

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as earlier argued, Glaser discloses the use of non-conductive insulated materials around the connector pins, which would not permit the claimed soldering. Finally, Glaser neither teaches nor suggests anchor holes that are located in a path region of substantial propagation of stress resulting from a difference in coefficients of linear expansion between two substrates. Absent some teaching or suggestion of the claim features by at least one of the cited references, an obviousness rejection of Claims 4-6 simply cannot be maintained. Accordingly, Applicants respectfully request withdrawal of the rejections.

With regard to the rejection of Claim 7 based on the combination of teachings from Muramatsu and Glaser and further in view of Yamagishi, Applicants rely on the arguments presented above with respect to the non-obviousness of the claimed invention over the combined teachings of Muramatsu and Glaser. Applicants further assert that the Yamagishi patent does not provide the teachings which are missing from the combination of Muramatsu and Glaser, since Yamagishi neither teaches nor suggests anchor holes that are located in a path region of substantial propagation of stress resulting from a

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difference in coefficients of linear expansion between the glass substrates, with anchor pins inserted into the anchor holes. Moreover, Yamagishi teaches that through vias be disposed along a direction parallel to the longitudinal direction of the printed circuit board (see: Col. 3, lines 53-67), which teachings are consistent with Muramatsu and contrary to the present claim language. The Yamagishi use of a ground plane does not, alone or in combination with the Muramatsu and Glaser patent teachings, obviate the invention as recited in Claim 7. Accordingly, Applicants respectfully request withdrawal of the rejection of Claim 7.

Based on the foregoing amendments and remarks, Applicants respectfully request entry of the amendments, reconsideration of the amended claim language in light of the remarks, withdrawal of the rejections, and allowance of the claims.

Respectfully submitted,

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